

## **CERTIFICATE OF VERIFICATION**

I, Jun-tae Kang of 648-23 Yeoksam-dong, Gangnam-gu, Seoul, Republic of Korea state that the attached document is a true and complete translation to the best of my knowledge of the Korean-English language and that the writings contained in the following pages are correct English translation of the specification and claims of the Korean Patent Application No. 10-2001-0001155.

Dated this 21<sup>th</sup> day of August, 2007.

Signature of translator: \_\_\_\_\_



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# KOREAN INTELLECTUAL PROPERTY OFFICE

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Application Number: Patent Application No. 2001-  
0001155

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Applicant: LG Electronics Inc.

**COMMISSIONER**

**[ABSTRACT OF THE DISCLOSURE]****[ABSTRACT]**

Disclosed is a position-matched information system and operating method thereof that determines a current location of a serviced subject by a position tracking using a mobile terminal of the corresponding service subjects and selectively transmitting one of the previously-registered contents suitable for the current location of the mobile terminal. Accordingly, a mobile subscriber is provided with current information relevant to the user's present location.

**[TYPICAL DRAWING]**

FIG. 2

**[INDEX TERM]**

Position-matched-information-service, position-tracking, English-conversation-multimedia

**[SPECIFICATION]****[TITLE OF THE INVENTION]**

METHOD FOR PROVIDING INFORMATION SERVICE MATCHED WITH  
TERMINAL-POSITION

**5 [BRIEF DESCRIPTION OF THE DRAWINGS]**

FIG. 1 illustrates a diagram for a system of providing a  
position-matched information service according to the  
preferred embodiment of the present information;

FIG. 2 is a flowchart illustrating a process of  
10 providing a position-matched information service  
according to the preferred embodiment of the present  
invention;

FIG. 3 is a flowchart illustrating a process of  
providing a position-matched English conversation  
15 service according to a preferred embodiment of the  
present invention; and

FIG. 4 is a flowchart illustrating a process of  
providing a position-matched English conversation  
service according to a preferred embodiment of the  
20 present invention.

**\*Reference numerals of the essential parts in the  
drawings\***

10: Mobile Terminal(MT) 20□30: Base Transceiver  
Stations(BTS)

25 40 : Base station Controller(BC) 50: Mobile Switching

Center(MSC)

60: Inter-Gateway(IG)                      70: position server

80: home location register(HLR)              90: service server

**[DETAILED DESCRIPTION OF THE INVENTION]**

5      **[OBJECT OF THE INVENTION]**

**[FIELD OF THE INVENTION AND DISCUSSION OF THE RELATED  
ART]**

The present invention relates to a mobile communication  
system, and in particular, to a position-matched  
10 information system and operating method thereof.

Radiodetermination is a rapidly developing technology,  
to which many efforts are being made for the development  
of mobile communication network technology.

Standardization for a next generation mobile  
15 communication field is in progress to provide a variety  
of services to mobile subscribers using  
radiodetermination.

Radiodetermination in a mobile communication environment  
is a basic technology for a service that provides  
20 location information of a car, ship, or the like, or a  
service for tracking a location of a mobile terminal.

Current technology allows for a position tracking  
service in mobile communication that enables position  
tracking of a mobile terminal within a radius of several  
25 meters. This distance was previously a radius of

several hundred meters.

Radiodetermination used for the position tracking service generally includes GPS (global positioning system) and DGPS (differential global positioning system). Such positioning systems, however, have various disadvantages. Hence, a new technique using a directional antenna has been proposed as a radiodetermination technique having a high accuracy and a low expense for a system construction.

The above-mentioned radiodetermination techniques are just exemplary; there are various other techniques available for radiodetermination. Further, advanced techniques for radiodetermination will be proposed along with the next generation mobile communication technology.

In another area of communication technology, mobile communication and Internet have merged together so as to enable Internet access and data transmission and reception through a mobile terminal. Thus, the next generation mobile communication service will bring a true wireless Internet era.

Wireless Internet technology has grown in popularity because it maximizes the convenience of usage by overcoming spatial limitations. Thus, by using mobile communication to access the Internet, users are not limited with respect to access points.

In order to provide Internet service based on the wireless Internet technology, radio Internet related standardization, such as wireless Internet browsers and operating systems, is required.

5 Currently, wireless application protocol (WAP) leads in the standardization of wireless Internet technology.

WAP is a standard that supports mobile communication network subscribers, allowing users to conveniently gain access to the Internet. Most of the mobile  
10 communication network service providers are planning to expand the service ranges gradually using WAP. The mobile communication network subscribers will thus be provided with a variety of services that were previously limited to the conventional wire-based Internet.

15 Eventually, when the next generation mobile communication service is developed and deployed, a position tracking service based on radiodetermination will become an important service. Using such a service, various wireless Internet information services that use  
20 the position tracking service will be provided. Additionally, the wire-based Internet service which is currently in service will be universalized into the wireless Internet service.

That is, there will be services provided to a user with  
25 various contents through the conventional wired Internet.

Unfortunately, the service that provides content suitable for the present location of a tracked mobile terminal based on position tracking in a mobile communication network has not been developed. Moreover, there is no service enabling a service provider to provide information relating to English conversation suitable for the location of the mobile terminal based specifically on the position tracking.

**[TECHNICAL TASKS TO BE ACHIEVED BY THE INVENTION]**

It is an object of the present invention to provide a method for providing a position-matched information service that determines a current location of a serviced subject by a position tracking using a mobile terminal of the corresponding service subjects and selectively transmits one of the previously-registered contents suitable for the current location of the mobile terminal. It is another object of the present invention to provide a method of providing a position-matched information service that has electronic maps corresponding to base Transceiver stations and English conversation multimedia suitable for the location (building or public site) of the electronic maps. The position-matched information service transmits video, audio and text suitable for the current site of the mobile terminal that is attained by matching the location tracking information with the



electronic maps of the base transceiver stations.

To achieve these objects and other advantages and in accordance with the purpose of the invention, as embodied and broadly described herein, a method of providing a position-matched information service includes searching a database of information for content corresponding to a current location of a the mobile terminal determined by location tracking when information content is requested by the mobile terminal and transmitting the searched content to the mobile terminal.

In another aspect of the present invention, a method of providing a position-matched information service includes tracking a location of a specific mobile terminal, registering a final location of the mobile terminal, searching a specific English conversation data stored in a memory that corresponds to the registered final location when the mobile terminal requests a English conversation service at the registered final location, and transmitting the English conversation data to the mobile terminal.

The searching the English conversation data preferably includes determining a site in accordance with the registered final location of the mobile terminal and searching English conversation data corresponding to the

determined site among a plurality of stored English conversation data, so as to provide data corresponding to the determined site from among a plurality of sites.

The determining the site in accordance with the final  
5 location includes receiving an inherent number given to a base transceiver station controlling the mobile terminal and a tracking location of the mobile terminal from a network providing the mobile terminal with a mobile communication, matching the received inherent  
10 number of the base transceiver station and the tracking location of the mobile terminal with an electronic map of the base transceiver station wherein the electronic map is previously retained, and determining a place coinciding with the tracking location of the mobile  
15 terminal on the electronic map as the site of the mobile terminal.

In a further aspect of the present invention, a method of providing a position-matched English conversation service includes storing a plurality of English language  
20 conversational phrases as multimedia data corresponding to a plurality of situations of a plurality of sites, respectively, determining a location of a mobile terminal in accordance with a location tracking procedure when the mobile terminal requests an English  
25 conversation service, determining which one of the

plurality of sites corresponds to the location of the mobile terminal, and transmitting an English language conversational multimedia phrase corresponding to the situation and site of the mobile terminal.

5 Preferably, the transmitting the English language conversational multimedia phrase includes transmitting a menu listing the plurality of situations corresponding to the determined site and transmitting, when a specific one of the situations is selected from the menu on the  
10 mobile terminal, the English conversational multimedia phrase of the site corresponding to the selected menu item.

The transmitting the English language conversational multimedia phrase may also be performed by transmitting  
15 a menu listing various situations set up to correspond to the determined site and the English language conversational multimedia phrase corresponding to the menu of the situations.

In a further aspect of the present invention, a method  
20 of providing a position-matched English conversation service includes storing a plurality of English conversational multimedia phrases relating to a plurality of conversations relevant to a restaurant, determining a present location of a mobile terminal when  
25 an English conversation service is requested from the

mobile terminal, and transmitting a selected one of the plurality of the restaurant related English conversational multimedia phrases to the mobile terminal when it is determined that the present location of the mobile terminal is a restaurant.

The restaurant related English conversational multimedia phrases are classified into a first situation multimedia data used for ordering meals, a second situation multimedia data used for dining at the restaurant, and a third situation multimedia data used for paying a bill at the restaurant, and wherein the classified first, second, and third situation multimedia data are transmitted to the mobile terminal in a single data stream.

In addition, the restaurant related English conversational multimedia phrases are stored by being classified into a first situation multimedia data used for ordering meals, a second situation multimedia data used for dining at the restaurant, and a third situation multimedia data used for paying a bill at the restaurant, and wherein one of the first, second, and third situation multimedia data selected from the mobile terminal is transmitted to the mobile terminal.

#### **[EMBODIMENTS OF THE INVENTION]**

Reference will now be made in detail to the preferred

embodiments of the present invention, examples of which are illustrated in the accompanying drawings. In explaining the present invention, identical parts will be given the same names and reference symbols, and  
5 iterative explanation of which will be omitted.

The preferred embodiment of the present invention relates to a position tracking technology on a mobile communication network. Moreover, the preferred embodiment further relates to a wireless Internet  
10 technology resulting from merging mobile communication with the Internet, so as to enable the mobile terminal to the gain access to the Internet and to have data transmission/reception.

Therefore, the preferred embodiment of the present  
15 invention is provided with position tracking information on a mobile communication network so as to provide a wireless Internet service.

In particular, the present invention is based on a system that will be described hereinafter.

20 FIG. 1 illustrates a system of providing a position-matched information service according to the preferred embodiment of the present information.

Referring to FIG. 1, the system preferably uses a wireless Internet access technology in the next  
25 generation mobile communication. Thus, a mobile

terminal (MT)10 is provided with various Internet information services transmitted using transmission control protocol/Internet protocol (TCP/IP). Additionally, information services preferably provide  
5 different content to the MT10 in accordance with the current location of the MT10.

WAP is preferably applied to the system, thereby describing a system for providing various information services through wireless Internet access.

10 The preferred embodiment of the system further includes a mobile communication network that supports wireless access and an information service providing network which transfers various information services provided by Internet to the mobile communication network.

15 The mobile communication network preferably includes a MT10, a plurality of base transceiver stations (BTS)20 to30, and a base station controller (BC)40. The system also preferably includes a mobile switching center (MSC)50, an inter-gateway(IG)60, a location server70,  
20 and a home location register(HLR)80. General functions of such components of the mobile communication network are well-known, so a detailed discussion of their functions is omitted in this description.

Prior to the description of the respective components of  
25 the mobile communication network, the information

service providing network will be described. The information service providing network preferably includes a service server90, which is linked to the mobile communication network through TCP/IP.

5 The service server90 transfers Internet data packets to the mobile communication network so as to provide various information services. The service server90 transmits data having a specific language style to the MT10 using one transmission protocol operating on TCP/IP.

10 For instance, data prepared with HTML (hypertext markup language) using HTTP (hypertext transfer protocol) operating on TCP/IP are transferred to the MT10.

The service server90 also possesses various kinds of linguistic conversation content. The service server90  
15 classifies for storage various English conversation multimedia for the respective locations as the linguistic conversation content so as to provide English language conversation multimedia corresponding to a site of the present location of the MT10.

20 Each of the English conversation multimedia, which are classified into and stored in the corresponding locations distinguished regionally on the electronic map, is a preferably combination of media.

The media preferably includes video data representing a  
25 virtual situation occurring in each location (building

or public site), audio data representing the conversation and/or description/commentary of the virtual situation, and text data representing a transcription of the audio with characters. This  
5 English conversation multimedia is preferably transmitted to the MT10 as Internet data packets.

When the service server90 transmits the Internet data packets, including the English conversation multimedia, the Internet data packets pass through the components  
10 constructing the mobile communication network.

The following describes the operations of the respective components of the system for providing the position-matched information service.

The MT10 provides a mobile communication network  
15 subscriber with the mobile communication services.

The MT10 receives various kinds of HTML information services transferred through TCP/IP in addition to voice communication service. In order to receive the information services, an inherent fixed IP address or a  
20 variable IP address is given to the MT10. Moreover, a wireless Internet browser (for example, a micro browser) is installed at the MT10.

When information services are requested by the MT10 through Internet access, an operation of the mobile  
25 communication is described as follows when a random IP



address allocated by the mobile communication network is given to the MT10.

Once the MT10 is powered on, a location registration message including a MIN (mobile identification number) for location registration of the MT10 and an ESN (electronic serial number) of the MT10 is transferred to the MSC50 through a corresponding BTS20,30 and the BC40. The MSC50 translates the MIN included in the location registration message so as to identify a subscriber.

When it is determined that the MT10 is a valid subscriber, the MSC50 preferably transfers a message including the MIN and ESN to the location server70. The location server70 checks the validity of the MT10 for the communication services using the MIN and ESN of the transferred message. If the service validity of the MT10 is verified, the location server70 completes the location registration of the MT10, stores the resultant information (such as information about a kind of service available for the MT10 and the like) in the home location register (HLR)80. The location server70 also transmits the resultant information to the MSC50. Specifically, the location server70 stores a base transceiver station number in the home location register80. In this case, the base transceiver station number is an inherent number set up previously for the

base transceiver station that governs a service area in which the MT is located. The base transceiver station number is stored in the home location register80 corresponding to the inherent numbers of the MIN and ESN of the mobile terminal when the location of the mobile terminal is registered. Hence, the service server90 checks the site (building or public place) of the mobile terminal using the base transceiver station number transferred from the location server and the tracked position of the mobile terminal.

When there is an Internet access call requesting the position-matched information service from the MT10 having completed its location registration, the MSC50 preferably sets up a call routine on the mobile communication network for Internet access through an inter-connection with the location server70 and home location register80.

After setting up the call routine on the mobile communication network, the MSC50 preferably sets up an Internet access call to the information service provider network for inter-working with the IG (inter-gateway)60. The BC (base controller)40 then checks radio resources (traffic channels) of the corresponding base transceiver stations (BTS)20,30 for a call setup, so as to command a channel allocation for the corresponding call. The call

setup for the MT10 requesting the information service is thus set-up. In this case, the IG60 allocates one IP address to the call requesting the Internet access, and also allocates a MODEM resource to provide an  
5 information service according to the IP address.

After the call has been setup to the information service providing network, the MSC50 requests service from the service server90 of the information service providing network, which provides the information (for example,  
10 multimedia and text information) requested by the MT10. If it is determined that the Internet access call of the MT10 requires position-matched information service, the MSC50 preferably tracks the location of the MT10 using radiodetermination. The MAS50 then provides the  
15 location server70 with the location tracking information (one coordinate value). The location tracking for the MT10 is preferably carried out on a continuous basis, and not only when the position-matched information service is requested. The location tracking information  
20 is thus continuously updated.

The location server70 then stores the current tracking location of the MT10 in the home location register80 corresponding to the base transceiver station number to which the MT10 belongs, based on radiodetermination.  
25 Simultaneously, the location server70 transfers the base

transceiver station number, at which the MT10 requesting the Internet access call is located, and the tracking location within the domain of the base transceiver station to the service server90. Because the tracking location of the MT10 varies frequently, the location server70 preferably temporarily stores the tracking location in an auxiliary storage, and not in the home location register80.

The location tracking and the storage of the location tracking information are merely a matter of realizing a system. The core of the preferred embodiment is that the location server70 informs the service server90 of the tracking location of the MT10.

Thus, the location server70 preferably transfers the base transceiver station number at which the MT10 is currently located and the tracking location within the domain of the base transceiver station to the service server90.

The service server90 acquires a specific building (for example, airport, restaurant, cinema, hotel, etc.) or a public place (for example garden, square, skiing resort, beach, etc.) where the MT10 is currently located by matching the transferred tracking location (coordinate value) in the domain of the base transceiver station of the MT10 with the electronic map corresponding to the

transferred base transceiver station number.

Then, the service server<sup>90</sup> transmits the multimedia information that corresponds to the acquired building or public place to the mobile communication network.

5 In the mobile communication network, the multimedia content is transferred to the MT10 through the routine of which call setup is completed. Namely, the IG60 transforms the transferred multimedia content into WAP data using a transport protocol operating on TCP/IP.  
10 Additionally, the IG60 converts a bandwidth and speed of the transmission. The transformed WAP data is transmitted to the MT10 through the components of the mobile communication network, and the MT10 outputs the received WAP data.

15 When the MT10 outputs the multimedia content converted into WAP data, the content is preferably conversation multimedia. Therefore, the MT10 is preferably equipped with a display module, which simultaneously enables the output of video, audio, and characters.

20 A process of providing the position-matched information service according to the preferred embodiment based on the above recited construction and operation will be described below.

FIG. 2 is a flowchart illustrating a process of  
25 providing a position-matched information service

according to the preferred embodiment.

According to the process, a service server<sup>90</sup> of an information service providing network stores electronic maps for the respective service areas of base transceiver stations<sup>20,30</sup> of a mobile communication network. The service server<sup>90</sup> also stores content for various situations in accordance with the respective sites (especially, buildings, public places, etc.) that are located in the domains of the stored electronic maps.

10 It is preferable that the "various situations" means that a conversation is conducted with a third party at each site in a domain of the corresponding electronic map. For instance, in an airport lobby, the situations may include the confirmation of a reservation, ticketing,

15 driving directions, and the like. The third party need not be a person with whom the conversation takes place, but could be an interactive dialog with an information source providing real time information.

The service server<sup>90</sup> preferably retains content for various situations. The contents are stored and

20 classified into different English conversation multimedia in accordance with the places discriminated in the domain of the electronic maps. Each of the English conversation multimedia preferably includes the

25 combination of video data representing the possible

virtual situations for the corresponding site (building, public place), audio data representing the conversation (with specific language) of the corresponding virtual situation, and text data represented by characters  
5 expressing the audio conversation.

Thus, referring to FIG. 2, in the mobile communication network, an Internet access call requesting position-matched information service is first received from the mobile terminal (S1). A location tracking for the  
10 mobile terminal is initiated (S2) and simultaneously, a content providing service is requested to the information service providing network (S3).

The location server then transfers the latest location information of the mobile terminal requesting the  
15 service. This is preformed by sending location tracking information and the inherent number of the base transceiver station at which the mobile terminal is located to the service server (S4). Accordingly, the service server of the information service providing  
20 network receives a request for contents providing service through the mobile communication network. The service server also receives the current base transceiver station number of the mobile terminal requesting the information and a tracking location in  
25 the corresponding base transceiver area from the

location server. In this case, the request for the contents providing service is for the provision of the English conversation multimedia.

Subsequently, the service server matches the transferred  
5 base transceiver station number and tracking location with the electronic map of the corresponding base transceiver station, thereby acquiring the location of the current mobile terminal (S5). For example, the location of the mobile terminal may be a building such  
10 as airport, hotel, or the like or a public place such as park, square, or the like. It should be understood that the location is not limited to the building or public place, but extends to any of the sites that are within domain of the electronic map.

15 The service server then searches the contents (English conversation multimedia) set up to be stored as corresponding to the present location of the mobile terminal (S6).

The service server next transmits the contents found by  
20 the search to the mobile communication network (S7). Then, in the mobile communication network, the contents (English conversation multimedia) for the corresponding site transferred from the service server are transmitted to the mobile terminal (S8). This transfer is  
25 preferably preformed according to a call-set-up



procedure.

Specifically, the service server transfers the English conversation multimedia for the corresponding site to the inter-gateway (IG) of the mobile communication network. The inter-gateway (IG) converts the transferred conversation contents into WAP data, and converts a transmission bandwidth and transmission speed of the data. The mobile switching center (MSC) receives the converted WAP data from the IG and then transmits the received data to the mobile terminal through the base controller and base transceiver station of the mobile communication network.

Finally, the mobile terminal outputs the contents (English conversation multimedia), received as WAP data, as video, audio and text characters at the same time through a display module (S9).

A process of providing a position-matched English conversation service according to an preferred embodiment of the present invention will be described hereinafter.

FIG. 3 illustrates a process of providing a position-matched English conversation service according to the preferred embodiment of the present invention.

Referring to FIG. 3, in a mobile communication network, the previously-registered tracking location of a mobile

terminal is preferably deleted, and a present tracking location is registered to a home location register (HLR) (S10). Updates of the location are preferably preformed continuously by continuous location tracking of the mobile terminal. A number of the base transceiver station governing a service area in which the mobile terminal is located is also registered in the home location register in addition to the tracking location. At the registered final tracking location, when an English conversation service is requested from the mobile terminal, the location server transfers the final tracking location of the mobile terminal registered in the home location register and the corresponding base transceiver station number to the service server (S20). Additionally, when the information request is made, the tracking location of the mobile terminal and the base station transceiver station number are transferred from the mobile communication network, and the service server matches the transferred tracking location with the electronic map corresponding to the transferred base transceiver station number. Thus, the site at which the mobile terminal is currently located is obtained and confirmed (S30). The service server searches the English conversation data (multimedia data) for the site corresponding to the

current location (i. e. , a service request location) of the mobile terminal among various kinds of English conversation data (multimedia data) stored differently for various sites (S40).

5 In this case, the English conversation data are packet data that combine various data. The data preferably includes video data, representing a virtual situation (for example, a conversation between two speakers) corresponding to each of the sites which are determined  
10 to be in domain of the electronic maps for the respective base transceiver stations. The English conversation data also includes audio data, representing the conversation in the virtual situation, and text data represented by characters expressing the conversation  
15 contents of the audio. The English conversation data, which are the respective English conversation multimedia corresponding to various situations for the respective sites, are preferably pre-stored in the service server. Therefore, the English conversation data are constructed  
20 with various kinds of English conversation multimedia classified into the respective sites and a menu of the various situations of the respective sites.

The English conversation data are transferred to the corresponding mobile terminal (S50). For example, in a  
25 constructional aspect of the English conversation data

according to the preferred embodiment, a menu for the previously-established situations corresponding to the current site of the mobile terminal is initially transmitted. Then, the English conversation multimedia  
5 of the selected situation among the various English conversation multimedia of the current site is transmitted after menu of the specific situation is selected by the mobile terminal user.

As another example, are all of the English conversation  
10 multimedia of the site corresponding to the final location of the mobile terminal, as well as the menus for the various situations corresponding to the site can be simultaneously and previously transmitted to the mobile terminal.

15 The menus for the received situations are preferably shown on the mobile terminal (S60). When one of the menus for the shown situations is selected, the multimedia data for the selected menu item is outputted (S70). The output of the English conversation data is  
20 carried out in a manner that a video and audio of the selected menu item are played. Additionally, a transcript of the audio portion maybe displayed in any language.

An exemplary process of providing a position-matched  
25 English conversation service according to a mobile

terminal located at a restaurant will be described hereinafter.

FIG. 4 is a flowchart illustrating an exemplary process of providing a position-matched English conversation service according to a mobile terminal located at a restaurant according to the preferred embodiment.

In this example, the multimedia data is in a conversation format, although any format could be used.

Referring to FIG. 4, multimedia for the restaurant English language conversation are previously stored in the service server (S100). As a matter of course, the service server stores various kinds of conversation multimedia for the respective sites, such as airport conversation multimedia, hotel conversation multimedia, and the like. The English language conversation multimedia for the respective sites are classified and stored correspondingly.

In this example, the restaurant conversation multimedia may include multimedia data for various situations, including ordering meals in English at the restaurant, dining at the restaurant, paying the bill at the restaurant, and the like. The multimedia data are preferably classified and stored in accordance with the corresponding situations. That is, for the various situations which may occur in restaurant, the service

server stores a first situational multimedia data for ordering in the restaurant, a second situational multimedia data for dining in the restaurant, a third situational multimedia data for paying the bill in restaurant, and the like by classification.

When an English conversation service is requested by a specific mobile terminal (S110), the service server determines the present location of the mobile terminal requesting the service, and a site (building or public place) in accordance with the present location (S120). In this example, in order to check the present location of the mobile terminal and the corresponding site, a location server transfers a base transceiver station number of the mobile terminal, which is registered in a home location register, and location tracking information of the mobile terminal transferred from the mobile switching center (MSC).

Specifically, the service server matches the transferred tracking location (coordinate value) with an electronic map of the base transceiver station number transferred from the location server, thereby confirming the site (building or public place) at which the mobile terminal is currently located.

If the site according to the location of the confirmed mobile terminal is a restaurant (S130), the service

server searches the restaurant English conversation multimedia previously stored therein (S140) and then transmits the resultant multimedia to the corresponding mobile terminal (S150).

5 In transmitting the resultant restaurant English conversation multimedia, the service server initially transmits the service menu, including the text expressing the respective situations (S150-a). The menus are a result of restaurant English conversation  
10 multimedia being stored and classified into the various situations. After one of the menu items has been selected through the mobile terminal (S150-b), the service server transmits the multimedia data corresponding to the selected menu item to the mobile  
15 terminal (S150-c).

In certain circumstances, the service server transmits the requested restaurant English conversation multimedia data as a whole with one data stream (S150-d). In this case, the transmitted data stream is constructed with  
20 text expressing the respective situations that may occur in the restaurant, videos reproducing the situations corresponding to the text of the respective situations, and audio played with the corresponding video.

As one of the text items for the respective situations  
25 received from the service server is selected, the mobile

terminal plays the video reproducing the selected situation and the English conversation audio corresponding to the video. In addition, the contents of the English conversation played by the audio and a translation of another language for the English conversation contents are simultaneously displayed.

**[EFFECT OF THE INVENTION]**

As mentioned in the above description, the preferred embodiment transmits content corresponding to a particular respective site (restaurant, airport, station, etc.) in accordance with the present location of the tracked mobile terminal. The location information is provided based on the location tracking of the mobile communication network, thereby enabling to provide a live language education for a given circumstance. By providing the English conversation multimedia matched with the location of the mobile terminal, the preferred embodiment enables one to cope immediately with encountering a foreigner or speaking in a foreign language.

Moreover, the preferred embodiment based on the location tracking information of the mobile terminal, provides English conversation video & audio, as well as text relating to the video & audio, which are suitable for the particular site (building or public place) where the



mobile terminal is currently located, thereby enabling one to improve the study effect on the spot.

Many alternatives, modifications, and variations will be apparent to those skilled in the art.

5     The foregoing embodiments and advantages are merely exemplary and are not to be construed as limiting the present invention. The present teaching can be readily applied to other types of apparatuses. The description of the present invention is intended to be illustrative,  
10     and not to limit the scope of the claims.